

WHAT IS CLAIMED IS:

1. A method for monitoring at least one print consumable of a compact disc (CD) printing device, comprising:

- (a) receiving a print job wherein the print job includes an image file and a copy number representing the number of copies of the image file that are to be printed;
- (b) determining a requested print consumable amount defined as an amount of print consumable needed to render the print job;
- (c) obtaining a remaining print consumable amount defined as an amount of print consumable that is loaded in the printing device;
- (d) comparing the requested print consumable amount to the remaining print consumable amount;
- (e) interrupting rendering the print job, prior to rendering the print job, when the requested print consumable amount exceeds the remaining print consumable amount;
- (f) rendering the print job with the CD printing device when the requested print consumable amount does not

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~~exceed the remaining print consumable amount.~~

2. The method of claim 1, wherein the interrupting step (e) includes warning the user that the print job cannot be completed.

3. The method of claim 1, wherein the interrupting step (e) comprises providing the user with an option of adjusting the copy number of the print job.

4. The method of claim 1, wherein:  
the print job further includes a print quality setting relating to an amount of print consumable used to print an image; and  
the interrupting step (e) comprises providing the user with the option of adjusting the print quality setting of the print job, whereby the requested print consumable amount can be reduced.

5. The method of claim 1, wherein the determining step (b) further comprises determining a single print consumable amount defined as the amount of print consumable needed to print a single copy of the image file, wherein the requested print

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~~consumable amount is determined by multiplying the single print consumable amount by the copy number.~~

6. The method of claim 5, wherein:  
the determining step (b) further comprises  
calculating a maximum copy number  
representing a maximum number of  
copies of the image file that can be  
printed based upon the remaining print  
consumable amount and the single print  
consumable amount; and  
the interrupting step (e) comprises  
providing the user with at least one  
option selected from the group  
consisting of:  
adjusting the copy number of the print job  
to the maximum copy number; and  
adjusting the copy number of the print job  
to a number that is less than the  
maximum copy number.

7. The method of claim 1, wherein the  
interrupting step (e) comprises providing the user  
with the option of adjusting the amount of print  
consumable that is available.

8. The method of claim 7, wherein:  
the print consumable is stored in a first  
print cartridge; and

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~~the interrupting step (e) further~~  
comprises:

(e)(i) receiving a filename for the first print cartridge;

(e)(ii) saving the remaining print consumable amount of the first print cartridge in a memory under the filename;

(e)(iii) replacing the first print cartridge with a second print cartridge having a remaining print consumable amount;

(e)(iv) resetting the remaining print consumable amount to the remaining print consumable amount of the second cartridge; and

(e)(v) returning to the comparing step (d).

9. The method of claim 8, wherein the second print cartridge is one of a new print cartridge having a maximum remaining print consumable amount and a used print cartridge having a remaining print consumable amount that is stored in memory under a filename.

10. The method of claim 1, wherein the interrupting step (e) comprises providing the user

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with an option of canceling the rendering of the print job.

11. The method of claim 1, wherein the interrupting step (e) comprises providing the user with an option of rendering the print job without any adjustments.

12. The method of claim 1, wherein the rendering step (f) further comprises updating the remaining print consumable amount by deducting the requested print consumable amount.

13. The method of claim 5, wherein the rendering step (f) comprises:

(f)(i) printing a single copy of the image file;

(f)(ii) deducting the single print consumable amount from the remaining print consumable amount; and

(f)(iii) repeating the printing step (f)(i) and the deducting step (f)(ii) until the print job is completely rendered.

14. The method of claim 1, wherein the print consumable of the CD printing device is one of ink, toner, colored dye ribbon, and wax based ribbon.

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15. A method for monitoring at least one print consumable of a printing device, comprising:
- (a) receiving a print job from a user, wherein the print job includes a number of image files that are to be rendered;
  - (b) determining a single print consumable amount for an image file of the print job defined as an amount of print consumable needed by the printing device to render the image file;
  - (c) estimating a requested print consumable amount needed to render the print job by multiplying the single print consumable amount by the number of image files that are to be rendered;
  - (d) obtaining a remaining print consumable amount defined as an amount of print consumable that is available to the printing device;
  - (e) comparing the requested print consumable amount to the remaining print consumable amount;
  - (f) interrupting rendering the print job, prior to rendering the image file, when the requested print consumable amount exceeds the remaining print consumable amount;

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16. The method of claim 15, wherein the interrupting step (g) includes providing the user with at least one of a warning that the print job cannot be completed, an option of reducing the number

~~of image files to be rendered, an option of canceling the print job, an option of adjusting the remaining print consumable amount, and an option of rendering the print job.~~

17. The method of claim 15, wherein the interrupting step (k) includes providing the user with at least one of a warning that the print job cannot be completed, an option of canceling the print job, an option of adjusting the remaining print consumable amount, and an option of rendering the print job.

18. The method of claim 15, wherein:  
the print job further includes a print quality setting relating to the amount of print consumable used to print an image; and  
the interrupting step (g) comprises providing the user with the option of adjusting the print quality setting of the print job.

20<sup>19</sup> The method of claim 15, wherein the print consumable of the CD printing device is one of ink, toner, colored dye ribbon, and wax based ribbon.

20<sup>21</sup> The method of claim 15, wherein the printing device is a CD printing device.

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The method of claim 15, wherein:

the image files of the print job relate to addresses; and

the printing device is adapted to render the image files onto one of envelopes and labels.

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A system for monitoring print consumables of a compact disc (CD) printing device, the system comprising:

a computer having a processor, an input/output (I/O) port connected to the CD printing device, and a memory;

a software application executable by the processor and configured to prepare a print job and to communicate with the CD printing device, through the I/O port, to render the print job, wherein the print job includes an image file and a copy number representing the number of copies of the image file that are to be printed; and

a print consumables monitoring module configured to:

communicate with the software application and the memory;

maintain a remaining print consumable amount representing the amount of

Page 1-126  
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~~print consumable currently~~  
available to the CD printing  
device in the memory;

determine a requested print consumable  
amount defined as an amount of  
print consumable needed to  
process the print job; and

compare the remaining print consumable  
amount to the requested print  
consumable amount;

whereby the rendering of the print job is  
interrupted when the requested print  
consumable amount exceeds the  
remaining print consumable amount.

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